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Letter from the Editors

An Interview with Ethnobiologist Dr. Elizabeth Widjaja

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In this Letter from the Editors that caps the second volume of Ethnobiology Letters, we are honored and excited to introduce you to Dr. Elizabeth Anita Widjaja who currently works as a Senior Researcher in the Botany Division of the Indonesian Institute of Sciences and is affiliated with the Herbarium Bogoriense. She served as Director of the Plant Resources of South East Asia (PROSEA) between 2004 and 2008. The purpose behind our design of this Letter from the Editors is to present an interview with Dr. Elizabeth Widjaja and to spread the word about a successful female ethnobiologist from a developing country.



Photo 1 by Elizabeth Widjaja. *Gigantochloa atroviolacea* Widjaja Poaceae.

Elizabeth first came to our attention on February 5th, 2011 when she delivered the presentation, "Economic Botany from the Herbarium Amboinense to the Plant Resources of Southeast Asia." Elizabeth's presentation was her contribution to the posthumous celebration of Professor E.M. Beekman's life during which his translation of Georgius Everhardus Rumphius' legendary The Ambonese Herbal, Volumes 1-6 (2011, Yale University Press) was unveiled and he was awarded the NTBG David Fairchild Medal for Plant Exploration. This event occurred on the Miami campus of the National Tropical Botanical Gardens (NTGB), which is known affectionately as the Kampong, meaning "Village" in the family of Malay languages that includes Elizabeth's Bahasa Indonesia.

Elizabeth was born in the Kudus Regency in Central Java Province. She received her undergraduate education at the University Padjadjaran in Bandung. Her M.Sc. and Ph.D. are from the University of Birmingham, England. Among the awards Elizabeth has received for her scholarship are the Best Young Scientist from the Indonesian Institute of Sciences in 1996-1997, the World Biodiversity Day Award from the State Ministry of Environment in 1999, the Indonesian President Award in 2004, the Harsberger Medal from India's Society of the Ethnobotanists in 2001, and an award in 2010 for 30 years of service to the Indonesian government. Widjaja participates in the International Cooperative Biodiversity Group, which involves her Indonesian partners and their colleagues at the University of California campuses at Davis, Berkeley, and San Francisco.

Bamboo captures most of Elizabeth's attention. She has studied the taxonomy, propagation, genetics, ethnobotany, and folk classification of bamboo. She is particularly knowledgeable about Malesian and Indonesia types of bamboo. Elizabeth is the authority for numerous species of bamboo, including her favorite *Gigantochloa atroviolaceae* Widjaja Poaceae. This Indonesian species, known by the common name "black

bamboo" is portrayed in Photo 1. Black bamboo is Elizabeth's favorite species because of its beauty and its utility for furniture construction. Elizabeth's second favorite species is *Dendrocalamus asper* (Schultes f.) Backer ex Heyne Poaceae. She likes this species because of its, "large size and tasty young shoots which can be used as vegetables." (See photos 2 and 4.)

We explore Dr. Widjaja's interest in bamboo and other topics related to her life as an ethnobotanist in the following transcript of our interview with her.

Dr. Cynthia Fowler (CF): Talk about your work in the field of ethnobotany.

Dr. Elizabeth Widjaja (EW): My interest in bamboo began in 1975 with a study of bamboo musical instruments in West Java. Back then, I realized that Indonesians do not pay much attention to bamboo, because it is so commonplace for them. In other areas of ethnobotany, I have studied folk classifications of local rice and bananas in the northern region of Eastern Kalimantan.

CF: How would you describe the ethnobotanical significance of bamboo in Indonesia?

EW: Indonesians on Java, Bali, Lombok, and elsewhere use bamboo in thousands of ways. The Torajanese of South Sulawesi, for example, use bamboo to make roofs for their homes. Torajanese use bamboo to mark almost every phase of life, from birth until death. They use the stems, roots, and leaves of bamboo.

CF: How is bamboo used when people die? What communities use bamboo for funeral ceremonies?

EW: Bamboo biers are constructed to carry corpses to the graveyards. The Balinese wait several days before cremating family members' corpses. Balinese funeral ceremonies sometimes occur weeks or months after a person's death. A special species of bamboo – the yellow variety of Schizostachyum brachycladum Kurz Poaceae (Photo 3) – is used to catch the water that leaks from decaying corpses when the cremation or burial of the body is delayed.

CF: Please describe the use of bamboo in the birth of children.

EW: Midwives cut the umbilical cords of newborns with slices of bamboo. Many Indonesian communities, including the Javanese, Sundanese, Balinese, and Melayu, use this practice.

CF: Do you have any bamboo in your home or office?

EW: I used to have items made out of black bamboo (Gigantochloa atroviolacea) but they were worn out after

more than twenty-five years of use. Currently, my home garden is only 2 x 5 meters, so I grow bamboo in containers. Several species are growing there. One that I recently planted is a climbing bamboo and I am waiting for it to flower. *Thyrsostachys siamensis* Gamble Poaceae, *Bambusa multiplex* (Lour.) Raeusch. ex Schult. & Schult. f. Poaceae, and *Melocanna baciffera* (Roxb.) Kurz Poaceae are also growing in my garden.



Photo 2 by Elizabeth Widjaja. *Dendrocalamus asper* (Schultes f.) Backer ex Heyne Poaceae.

CF: How would you describe your day-to-day life as an Indonesian ethnobotanist?

EW: [I am] a Senior Researcher. I have a lot of meetings. When I am not in meetings, I do research in the herbarium or I work in my office on proposals and manuscripts.

CF: What professional meetings have you attended recently?

EW: I mostly attend meetings about bamboo. I am interested in any sort of meeting about bamboo. Sometimes I am not able to attend conferences because the registration fees are too expensive and I have no funding to pay for my travel and accommodation expenses.

The most recent conference I attended was the Rhumphius celebration [at the NTBG Kampong in

Miami]. I have attended the Flora Malesiana Symposium where we discussed the revision of flora in the Malesia and I presented a paper on the flora of Mekongga Mountains in southeast Sulawesi. Another meeting I have attended was for the Association for Tropical Biology and Conservation where I presented a paper about the loss of floral diversity on Java.

CF: What are the most critical issues in the ethnobotany of Indonesia today?

EW: Medicinal plants, natural dyes, and traditional knowledge concerning the conservation of nature are all current issues in Indonesia.

Elizabeth has written two books about bamboo plus over seventy-five papers about her varied research interests. A selective list of her publications appears below. To conclude our *Letter from the Editors* for Volume 2 of *Ethnobiology Letters* we reprint this quote in which Widjaja describes her observations in 1977 of Torajan funeral ceremonies.

"When a Torajanese dies, a kind of undertaker called tomabalun will prepare the body for the ma' dio' tomate ceremony (Tangdilintin 1975). First he will make a mixture of various herbs for spicing and perfuming the water to be used in bathing and smearing the body or pouring into the mouth of the deceased (Wellenkamp 1984). The herbs used by one of the tomabaluns consist of leaves of lemo (Citrus hystrix DC) and young leaves of coconut (Cocos nucifera L.) and banana (Musa paradisiaca L.) which are boiled in water. Other tomabaluns many use different kinds of plants, such as the rind of pangi (Pangium edule Reinw.), the powdery substance obtained from the inner part of the culm of bamboo petung [Dendrocalamus asper (Schult. f.) Backer ex Heyne], and also powder made of buffalo horn. Wellenkamp (1984) reported the use of dambu (Psidium guajava L.) during washing of the body. Bathing of the corpse has a dual purpose: to purify it and to embalm it for long-term preservation. Herbs and other material or secret formulas used in preparing the corpse but not disclosed to me by the tomabalun apparently have preservative properties..." (Widjaja 1988:251).



Photo 3 by Elizabeth Widjaja. *Schizostachyum brachycladum* var. *kuning* Kurz Poaceae.

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Photo 4 by Elizabeth Widjaja. D. asper.